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REPORT

to the

MONTANA LIVESTOCK SANITARY BOARD

December 1, 1945 to November 30, 1946

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REPORT

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MONTANA LIVESTOCK SANITARY BOARD

December 1, 1945 to November 30, 1946

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MONTANA LIVESTOCK SANITARY BOARD

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C. K. Warren, Deer Lodge, President

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Clifford J. McNamara, Big Sandy

M. H. Tschirgi, Wyola

Peter Iteaina, Dodson

***

W. J. Butler

Secretary and Executive Officer
State Veterinary Surgeon
Director of Laboratories

***

Helena, Montana
December 1, 1946

Honorable Sam C. Ford
Governor of Montana
Helena, Montana

Sir:

In compliance with Section 3292 Political Codes of Montana 1935, we transmit herewith the report of the State Veterinary Surgeon to the Montana Livestock Sanitary Board for the year December 1, 1945 to November 30, 1946.

Respectfully submitted,

MONTANA LIVESTOCK SANITARY BOARD

W. J. Butler

W. J. Butler, Executive Officer

REPORT TO

MONTANA LIVESTOCK SANITARY BOARD

Helena, Montana
December 1, 1946

Honorable Livestock Sanitary Board
Helena, Montana

Sirs:

In compliance with Section 3292 Political Codes of Montana 1935, we submit the report of the State Veterinary Surgeon and Executive Officer of the Montana Livestock Sanitary Board for the year December 1, 1945 to November 30, 1946.

There were six meetings of the Livestock Sanitary Board held during the year 1946.

The first meeting was held at Great Falls on January 18, 1946.

The annual meeting was held at Helena, Tuesday, April 9, 1946.

The third meeting was held at Great Falls, Saturday, May 18, 1946.

The fourth meeting was held at Helena, Monday, July 1, 1946.

The fifth meeting, which was considered an emergency meeting, was held at Helena, Wednesday, July 24, 1946.

The sixth meeting was held at Helena, Monday, August 26, 1946.

At these various meetings matters pertaining to the duties of the Livestock Sanitary Board and of interest to the livestock industry were discussed at length and acted upon.

All actions, regulations and orders promulgated by the Executive Officer during the interim of the various meetings were approved.

The complete minutes of all meetings are on file in the office of the Secretary at the Livestock Building at Helena, Montana.

FOREWORD

Probably this past year has been the most profitable in the history of the Montana livestock industry. Grass was not quite as plentiful during 1946 as it was during 1945 but prices were very much higher. Fluctuating high prices such as prevailed during 1946, are not productive of a stabilized industry. The 1946 high prices, however, are simply leveling out the price structure that has prevailed over a period of years.

No one should begrudge the livestock industry its present prosperity when we take into consideration that during the drought periods of 1934 and

then again in 1936 we sold hundreds of thousands of mature cattle for $15.00 or less, per head. Supply and demand eventually levels out price structures.

I remember an old cowpuncher, during a conversation when a group of us were berating and begrudging certain conditions that were not favorable to us, saying "Stop spinning an empty loop, eventually these matters will adjust themselves, for as far as the pendulum of a clock swings one way it swings the other."

Apparently our cattle population continues to increase, slowly but surely, while our sheep population continues to decrease. We had a splendid calf crop this past year, probably the greatest calf crop Montana has ever known.

How many cattle we will ship out, or have shipped out, is simply a guess as yet, but in order to keep our cattle population at an equilibrium we should have shipped, and slaughtered within the State during 1946, somewhere in the neighborhood of 800,000 cattle.

The death loss in our livestock has been a very small one. In fact, figures which we have received from Federal sources and information which we have obtained lead us to the belief that the livestock loss in Montana is probably the least of any state in the United States. Practically all diseases of a few years ago that were burdensome to our livestock economy have been eradicated or controlled.

As we have stated in previous reports however, bacteria never sleep and they never quit trying to find a suitable host. New diseases will make their appearance. What with the high cost of labor, supplies and ever-increasing taxes, it simply means that if our livestock industry is to prosper our livestock must be maintained free from disease and in a healthy vigorous condition. We will either conquer disease or disease will conquer us and disease never shows or gives any quarter. Always it has been and always it will be, - the survival of the fittest!

FINANCES

For the first time in a great many years, the Montana Livestock Sanitary Board has been financed during the past biennium so that it could render fitting veterinary service. The lack of adequate finances during the past twenty years or so has cost the State much more than an adequate appropriation to the Livestock Sanitary Board would have cost. When diseases gain a foothold they are hard to eradicate and some diseases have gained a foothold that might better have been controlled in past years if the Livestock Sanitary Board had been adequately financed.

We are adequately financed this year when we take into consideration present existing conditions. However, as we reported in our 1945 report, we have been unable, with the salaries that we may pay, to attract well-qualified veterinarians to the Livestock Sanitary Board corps. We lost four salaried veterinarians during the past year, and we have been unable to replace them. We need a veterinary assistant in the laboratory. We are very much in need of a district deputy in the Butte district, and we are in need of the services of a junior district deputy at Shelby and at Sidney. More adequate veterinary service should also be furnished to northeastern Montana. There is only one veterinarian located in northeastern Montana,

other than a Federal veterinarian at Wolf Point. The deputy State veterinarian is located at Glasgow and it is simply impossible for him to render adequate veterinary service in the large district to which he is assigned.

We are of the opinion that the system initiated and inaugurated by the Livestock Sanitary Board several years ago of permitting district deputies to practice veterinary medicine when that practice does not interfere with State work is the only reason that we have been able to hold our veterinarians as well as we have. Certainly any veterinarian in private practice in any reasonably worthwhile location today can make considerably more money than the salary paid by the State.

It is indeed fortunate that we have been able to uphold the esprit de corps of the Livestock Sanitary Board as efficient veterinary service is definitely essential if our livestock industry is to prosper.

VETERINARY RESEARCH LABORATORY

The Veterinary Research Laboratory continues to render efficient and very worthwhile service to the livestock industry of Montana.

MOBILE LABORATORY

The Livestock Sanitary Board was very fortunate in securing from the United States Army for a very nominal sum a completely equipped mobile, or traveling laboratory. The laboratory proper is mounted on a General Motors truck chassis. The purpose is to use this mobile laboratory in emergencies--to send it directly into the field so that an immediate diagnosis may be made, with resultant saving in the lives of livestock. Also, it will be a very desirable asset when conducting area disease-control work.

It may be stated in passing that the laboratory contains essential tables, drawers, receptacles, mechanical refrigerator, electric incubator, centrifuge, sink with hot and cold water, screened windows, and numerous electric outlets and electrical fixtures.

LITIGATION

Violation of existing regulations has required complaints to be filed and action in Justice Court. In every instance where such action was necessary the defendant was found guilty. We are pleased to report that there were no cases taken into District Court.

HORSES
GLANDERS AND DOURINE

There were no cases of glanders or dourine found in horses in the State of Montana during the year 1946.

DISTEMPER

Distemper was not as prevalent in horses in 1946 as it was in 1945. As we stated in our 1945 report vaccination with an autogenous vaccine and treatment with sulfa drugs or penicillin has proved an effective treatment for distemper.

ENCEPHALOMYELITIS

There were 56 cases of encephalomyelitis reported in 1946. Out of this number 18 animals were reported as having died.

As is well known, this disease, which is also sometimes referred to as sleeping sickness, is a dangerous disease and takes the lives of many horses when it occurs in epizootic form. It is a disease that also may be transmitted to the human family. Quite recently it has been determined that poultry and wild bird life undoubtedly are the reservoir of the virus that causes encephalomyelitis.

INFECTIOUS ANEMIA

No cure or definite preventive that can be applied under range conditions has been found for infectious anemia or what is more commonly called swamp fever. It is still found in two or three districts in Montana. Apparently it has not spread during these many years. In fact, there are some districts free from disease in which the disease was quite prevalent a number of years ago.

PERIODIC OPHTHALMIA

We mention this disease just as a matter of interest and in order to report that the disease is not known to exist in the State of Montana. In fact, in all of the many years we have lived in Montana, we believe that we have only seen one case of periodic ophthalmia, and in that instance we were not too sure of that diagnosis.

CATTLE
TUBERCULOSIS

During the year 1946, in cooperation with the United States Bureau of Animal Industry, 25,286 cattle were tested for tuberculosis. Out of this number 4 animals reacted, or fifteen one thousandths of one percent reactors.

Retests of reactor herds failed to disclose any further reactors.

We received post-mortem reports indicating that 4 Montana animals had been found tuberculous on post-mortem inspection. Three of the herds from which these cattle originated have been tested but no reactors disclosed. The fourth herd is a herd of a little over 800 cattle. It is maintained under pasture at all times but has a summer range and a winter range. In the first week of December these cattle will be trucked from their summer range to their winter range and the entire herd will be tested sometime during the second week in December. The results of this test will be reported in the 1947 annual report.

All 1945 reactor herds have been tested and handled in accordance with Federal and State regulations and all reactor herds now have given three successive negative tests for tuberculosis and have been released from quarantine.

Under Federal and the uniform regulations governing modified accredited areas, it is required that we tuberculin test a certain percentage of cattle each year and in the various areas every three years. In a state the size of Montana, it becomes a very definite economic problem as well as a physical

problem to tuberculin test range and semi-range cattle.

In Montana perhaps we are particularly fortunate in that the Montana Livestock Sanitary Board regulations require an annual tuberculin test on dairy cattle supplying fluid milk for consumption. In this way we get a very decided check and cross-check view of disease conditions and particularly of tuberculosis should it happen to exist.

We also receive post-mortem reports from all of the various abattoirs in Montana where meat inspection is maintained and from a great majority of abattoirs outside the State where Federal meat inspection is maintained if an animal from Montana is found diseased upon post-mortem inspection at any of these abattoirs. We believe that reporting post-mortem inspections is essential if we are to adequately and economically take care of disease conditions in livestock and render prompt and efficient veterinary service.

BRUCELLOSIS

In 1946 we blood tested 46,865 cattle for bovine brucellosis, or Bang's disease. Out of this number, 1,940 gave a positive reaction, or a percentage of 4.43 and 2,100 gave a suspicious reaction or a percentage of 4.8.

The elimination or control of bovine brucellosis in range herds is not considered a difficult problem when there is strict cooperation between the stockgrower and the veterinarian. We have proved in many instances that this disease may be entirely eliminated from range herds simply by good herd management, which would include the limiting of the breeding season and the shipping of dry cows in the fall.

Where an owner desires to eliminate this disease in the fastest possible time, we advocate the blood testing of the entire breeding herd in the fall and the shipping to market of all reactors and suspects, and the vaccination with Brucella abortus vaccine of all replacement heifer calves. As I have stated, the disease may be eliminated from range or semi-range herds without the blood test, only it takes a little longer.

In dairy herds producing milk for pasteurization we advocate the blood testing of all breeding animals in the herd, with the elimination of all reactors and suspects, and the vaccination of all non-reacting adults, and the continued vaccination of replacement heifer calves. Naturally, in such herds, before we vaccinate adults, the advantages and disadvantages of adult vaccination must be explained to and understood by the owner of the dairy herd.

In raw-milk dairy herds we advocate and require the blood testing of all breeding animals in the dairy herd unit and the immediate segregation and elimination from the herd of all reactors and suspects. In reactor herds we require ridged follow-up tests, not more than 30 days apart, until we get at least two, and preferably three, successive negative tests. In raw-milk dairy herds we advocate the vaccination of replacement heifer calves. However, under regulations of the Montana Livestock Sanitary Board, no animal that gives a positive or suspicious reaction to a blood test for bovine brucellosis may be used in the milking string of a raw-milk dairy herd, and this ruling applies to vaccinated animals as well as to non-vaccinated animals.

JOHNE'S DISEASE

There was one case of Johne's Disease reported in a cow during 1946.

SCABIES

Sarcoptic mange was found in a small herd of forty cattle owned by a wheat farmer. These cattle had been kept under fence continuously and there was no outside exposure. They were dipped under official supervision and there has been no recurrence of the disease.

There were no cases of psoroptic mange or scabies reported in 1946.

ANTHRAX

There were no cases of anthrax officially diagnosed in Montana during 1946.

In southeastern Montana eleven animals died very suddenly. A veterinarian from an adjacent state, who is located near where the loss occurred, was called in. He diagnosed the condition as anthrax. Representatives from this Department were detailed to investigate the loss. The Livestock Sanitary Board Laboratory at Helena was unable to confirm the diagnosis of anthrax either by cultural growth or guinea pig inoculation. The field diagnosis by our district deputy was cocklebur poisoning.

To prevent a recurrence of anthrax in districts where the disease had previously been diagnosed, including vaccination of animals in the district where the danger of anthrax may have been encountered, there were vaccinated in Montana for this disease, 3,580 cattle.

ANAPLASMOSIS

There were six cases of anaplasmosis diagnosed in Montana in 1946. These cases were found in imported cattle and cattle with which they had come in contact, in a district in which the disease had not been previously diagnosed.

There were no cases of anaplasmosis reported or diagnosed in the areas where the disease was found two and three years ago.

This speaks very well for the control measures initiated by the Livestock Sanitary Board and for the preventive measures taken by our stock men. While we did not find any cases in 1946, this does not mean that it may not be found in 1947. This disease may become quiescent and then break out in subsequent years. There always is of course the danger of the disease being imported.

It is a very difficult disease to control and to prevent its spread, for the reason that recovered animals may become carriers. In fact, practically all recovered animals become carriers and it is next to impossible, with our present methods of diagnosis, to diagnose and determine these so-called carriers.

BACILLARY ICTEROHEMOGLOBINURIA

In 1946 we vaccinated 13,975 cattle for bacillary icterohemoglobinuria or the condition that is commonly called red-water. In Montana in 1946 35 cases of red-water were diagnosed.

For a brief summary and outline of this disease, we refer you to our 1945 report.

We believe that we are gaining headway in our knowledge of this disease and that the laboratory work being carried out by Dr. Arthur M. Jasmin may ultimately lead to the preparation of a more staple vaccine and that may also unfold knowledge which will lead to more definite methods for the prevention of this disease.

Control measures which we have practiced, and which have been largely under the supervision of Dr. Charles F. Haynes, very definitely have prevented a wider spread of the disease than has occurred. However, in any disease caused by a spore-forming anaerobe, there is always the danger of the disease being carried and spread by wild animal life and wild bird life. To a great extent in the control of diseases of this character, we must depend upon a potent vaccine that not only gives a solid immunity, but an immunity for a considerable period of time. The immunity conferred by the vaccine which we have at present appears to be only good for about six months.

BLACK DISEASE

Black disease in cattle, or the disease caused by the Clostridium novyi, has been diagnosed in areas where red-water exists. In fact, in several instances Black disease was originally diagnosed as bacillary icterohemoglobinuria and it took laboratory findings to determine that the condition actually was Black disease rather than bacillary icterohemoglobinuria.

LEPTOSPIROSIS

There were no cases of leptospirosis reported in cattle during the year 1946.

MALIGNANT CATARRH

There were two cases of malignant catarrh reported in cattle in 1946.

PULMONARY EMPHYSEMA
(Asthma)

This peculiar phenomenum continues to increase. Apparently the condition is not of an infectious contagious nature, although it might possibly be due to a virus, but investigations and research work indicate that the condition is more apt to be due to a body sensitization. There also is the possibility that this condition, which apparently is similar to spontaneous pneumothorax in the human family, may be connected in some peculiar way with cyanogenetic properties contained in our grasses during the fall.

PODODERMATITIS

This condition which was a very rare disease in years gone by is on the increase. Possibly it is connected with erysipelas. So far, none of our

research laboratories have determined the causative agent of pododermatitis or foul foot of cattle.

We have no practical and effective measures for the prevention of this disease under range conditions. Treatment, however, is very effective. Intravenous injections of sulfapyridine have proved very effective. If sulfapyridine is not available it has been our observation that sulfathiazole may be used with good results.

URINARY CALCULI

This condition also has been increasing during the past several years. However, up to the present writing, it has not been as prevalent during 1946 as during the past several years. Our observations indicate that perhaps a phosphorus imbalance rather than a vitamin A deficiency is partly responsible for the formation of urinary calculi.

In all, during 1946, we have inspected 3,846 cattle for urinary calculi, and out of this number 94 were definitely affected.

INFECTIOUS KERATITIS
(Pink eye)

Infectious keratitis in cattle was quite prevalent during this past year. We are in hopes that a vaccine made up from the Hemophilus bovis organism may prove to be a preventive for this disease.

There are several treatments that are very effective, but naturally a preventive is more to be desired than a cure.

VARIOUS DISEASES

As in the past, there were isolated cases of coccidiosis, hemorrhagic septicemia, malignant edema, blackleg and a number of minor disease conditions reported in cattle during the past year. However, there were no serious outbreaks of a dangerous disease and there were no cases of screwworm infestation reported in Montana in 1946. We refer you to the report of the Bacteriologist & Pathologist for a list of the various diseases.

SHEEP
SCABIES

Sheep scabies does not exist in the State of Montana and has not existed in our native sheep for the past thirty years.

FOOT ROT

Foot rot was diagnosed in one band of sheep during 1946. The disease has been completely eradicated in all bands of sheep owned by a company which operates under range conditions. In one of the other range outfits, the disease has been very definitely controlled and reinspections may prove that foot rot in the various bands may now have been completely eradicated.

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Foot rot is a disease that takes everlasting care and good hard work to eradicate. To eradicate the disease, every sheep in an infected band must be set up and every one of the f ur feet of each sheep thoroughly examined. If there is any indication of foot rot or undermining of the tissue, then the foot must be pared so that all diseased tissue is removed. After the diseased tissue is removed, the foot should be thoroughly soaked in a saturated solution of copper sulphate. There is just no shortcut to cleaning up or eradicating foot rot. It requires everlasting care and work upon the part of the owner as well as upon the part of the supervising veterinarian.

LIP AND LEG ULCERATION

Lip and leg ulceration was diagnosed in a band of bucks running under range conditions. Careful cutting out of affected bucks and treating with copper sulphate resulted in the eradication of the disease in this particular band.

During the year we inspected 15,159 sheep for lip and leg ulceration, out of which 808 sheep were found to be affected.

Lip and leg ulceration, like foot rot, requires care and constant vigilance upon the part of the sheep grower and his herder. Animals showing any infection whatsoever should be cut out of the band immediately, treated, isolated and quarantined, and as a precautionary and preventive measure, the entire band should be run through a foot bath of copper sulphate.

CONTAGIOUS ECTHYMA

Contagious ecthyma has not been an economic factor. However, we do occasionally see this condition in lambs. Many of our sheep men are taking precautionary measures and are vaccinating their lambs against contagious ecthyma. Contagious ecthyma vaccine has proved itself and is a worthwhile and reliable vaccine.

During the year there were reported 1,123 cases of contagious ecthyma in 5 bands of lambs.

VIBRIONIC ABORTION

There were 80 cases of vibrionic abortion reported in Montana during 1946.

BLACKLEG

There were 5 isolated cases of blackleg reported in sheep in 1946.

ENTEROTOXEMIA

Enterotoxemia was reported in 5 different bands of sheep in 1946.

This condition as has been recorded in previous reports, usually affects the best, fattest and the quickest maturing lambs - when it does make its appearance, and usually it occurs in lambs on lush feed or on heavy concentrated feeds in feedlots.

A new vaccine known as enterotoxemia toxoid, we believe will prove to be very effective in preventing this condition.

INTESTINAL PARASITES

There were a greatly diminished number of cases of internal parasite infestation reported in 1946. This diminished number was not due solely by reason of a lesser sheep population, but also was due to an actually lesser incidence of the condition.

It is the recommendation of this Department that sheep growers feed phenothiazine in salt in the proportion of one pound of phenothiazine to nine pounds of salt. This is to be placed before ewes beginning at least a month before they start lambing, and kept before them during the spring and summer months.

Where the Monezia expansa or tapeworm is the infesting parasite, we recommend that the infested sheep be treated with lead arsenate. For young lambs, we prefer one-half gram of lead arsenate although larger lambs may get one gram.

In treating for tapeworms, it is advisable to treat lambs the latter part of July or the first part of August and we definitely recommend that the lead arsenate be given in a capsule rather than in tablet form. Tablets most frequently will go into the rumen and lie there inert for hours or may be regurgitated and ejected from the mouth. Medicine in capsule form usually goes into the second stomach and then on down to the third or fourth stomach and in this way does more effective work.

NODULAR WORMS

Oesophagostomum columbianum has never been reported or observed in sheep in Montana.

VARIOUS DISEASES

Various minor diseases were reported in sheep during 1946 but nothing that was of a serious nature.

SWINE
HOG CHOLERA

During the year 1946 hog cholera was found on four premises as compared with ten in 1945 and twenty-five premises in 1944. Most assuredly hog cholera has not been an important factor in the last three years in the growing of hogs in Montana.

ERYSIPELAS

The organism that causes erysipelas may live in the soil and apparently this is a condition that will have to be dealt with throughout the many years.

In 1946 we inspected and examined 1,944 hogs for erysipelas, out of which we found 150 animals affected.

In badly infected premises we recommend the treating of young pigs with swine erysipelas serum very shortly after birth. We believe these pigs will pick up natural infection, but that the serum will control the infection

and the combination will result in the young pigs building up an immunity.

Dr. B. O. Fisher, district deputy with headquarters at Great Falls, has used this method very successfully.

VARIOUS DISEASES

Worm infestation and various diseases were found in swine in 1946 but none of these conditions were of a serious nature.

WILD ANIMALS, GAME BIRDS AND FISH

Dr. Lee Seghetti of the Veterinary Research Laboratory, diagnosed scabies in elk in western Montana in February 1946. Fortunately, the scab mite is very selective and it is very doubtful if the scab mite that affects wild animal life will live and thrive on domestic animal life and vice versa.

DOGS
RABIES

Rabies or hydrophobia, does not exist in Montana and has not been observed or reported in the State since 1925.

POULTRY

The Montana Livestock Sanitary Board and the Montana Poultry Improvement Board have cooperated very efficiently and effectively to get the National Poultry Improvement Plan established in Montana.

We compliment the 1945 Legislative Assembly for providing for the creation of the Montana Poultry Improvement Board. Had this not been done, Montana poultry men would have suffered a very serious handicap and financial loss due to the fact that practically every state in the Union now requires that baby chicks shipped into their state originate from hatcheries operating under the National Poultry Improvement Plan.

The poultry industry of Montana could be built up into quite a sizeable industry and one which would bring credit as well as financial returns to the State. We sincerely trust that the 1947 Legislative Assembly will provide sufficient funds for the Poultry Improvement Board so that it may continue in conjunction with the Montana Livestock Sanitary Board to approve and certify for interstate shipment poultry and baby chicks grown in Montana.

During the year 1946 we supervised the testing or tested 4,031 poultry (chickens and turkeys) for pullorum disease. Out of this number there were 93 reactors.

During the year pullorum testing agents reported the blood testing for pullorum disease of 14,977 chickens with 412 reactors or a percentage of 2.75.

In conformity with the regulations of the Montana Livestock Sanitary Board a pullorum testing school and examination for State pullorum testers was held at Bozeman on September 5, 6 and 7. There were 27 persons who passed the examination and these persons have been certified by the Montana Livestock Sanitary Board as State pullorum testers.

DAIRY INSPECTION

The dairy industry was very seriously and adversely affected by Federal restrictions and rulings with the result that licensed dairy fluid milk production in Montana has decreased beyond the danger point. At the present time, there is not sufficient licensed dairy milk produced in Montana to supply the public demand for milk. This has resulted in some instances of market milk being used for fluid consumption. This is not a desirable procedure and is not one that tends to build up a bigger and better dairy industry.

It has been very difficult for dairy men to secure adequate dairy labor. A poor milker can ruin a good cow in a very few days and by improper milking he can cause an outbreak of mastitis in an otherwise healthy dairy herd.

Milk production requires the milking of dairy cows at least twice a day for 365 days. With present high wages and the advocation of the forty-hour week, it naturally follows that young and efficient men seek employment in industry that requires less working hours and that is more agreeable to them.

It is fortunate that so many of our distributors have built up pasteurizing plants. Otherwise, milk in Montana would have been rationed quite some time ago. Quite a number of our best producing dairies have discontinued operations. This is unfortunate. Dairying in the past has saved many a farm and we believe provides one of the most reliable incomes that any farm or farmer may have. Every effort should be made to build up the dairy industry rather than curtail its activities. There is no better food in the whole wide, wide world than milk-food products.

In order to conserve finances, and more particularly to assist milk plants, we have initiated a system of so-called dock or plant inspection of milk, and are using the methylene blue reductase test to determine the quality of milk delivered to the milk plant.

Methylene blue reductase kits have been forwarded to district deputies at strategic points so that they may make, right in the field, periodic tests of milk delivered to milk plants.

When milk consumption gets below the minimum requirement, then the health of our children and our people will suffer, with resultant financial loss to our country and mental decadence of our people.

MEAT INSPECTION

Official State meat inspection is still being carried on at eight abattoirs. Federal meat inspection is maintained at four abattoirs in Montana.

We strongly recommend to the various municipalities and cities that they institute a system of meat inspection. It would appear that cities that do not have meat inspection become dumping grounds of undesirable meat and meat food products by reason of the fact that such products are not permitted to be shipped into or sold in areas where meat inspection is required.

Meat inspection protects public health, in fact, it may be reasonably stated that future health protection will demand meat inspection.

At a later period of time and in areas where it can be conducted properly meat grading also should be required.

In 1946 the Livestock Sanitary Board issued 65 slaughterhouse licenses.

STALLION REGISTRATION BOARD

During the year 1946 the Montana Livestock Sanitary Board, acting as the Stallion Registration Board issued four purebred stallion licenses and renewed two purebred stallion licenses.

MONTHLY LETTER

This Department continues to issue a monthly letter on various disease conditions in livestock observed in Montana. This monthly letter is forwarded to each veterinarian in the State.

BACTERIOLOGICAL AND PATHOLOGICAL LABORATORY

We commend the Bacteriological and Pathological Laboratory of the Montana Livestock Sanitary Board for their very excellent work. We call your attention to the report of Dr. E. M. Jeneschild and trust that you will observe the wide scope of work that is performed by the Livestock Sanitary Board Laboratory.

CHEMICAL LABORATORY

Virgil A. Willson, chemist to the Livestock Sanitary Board is still with the armed forces.

Miss Jerree McCarty is acting chemist for the Livestock Sanitary Board and is performing chemical analyses in a most creditable manner.

HONORABLE BOARD OF EXAMINERS

We express to the Honorable S. C. Ford, Governor of Montana, the Honorable Sam W. Mitchell, Secretary of State and to the Honorable R. V. Bottomly, Attorney General, individually and as members of the State Board of Examiners our sincere personal appreciation and the appreciation of this Department for their counsel and the understanding assistance which they have rendered to us.

Without their comprehensive understanding of the problems that beset this Department during the past year, it may be said without reservation that we could not have carried on or rendered the veterinary service that was rendered during the past year.

STOCKGROWERS

The Livestock Sanitary Board corps appreciates the continued outstanding cooperation which the stockgrowers of Montana have rendered this Department.

UNITED STATES BUREAU OF ANIMAL INDUSTRY

The United States Bureau of Animal Industry has rendered a very efficient cooperative work with the Livestock Sanitary Board.

Dr. G. W. Cronen, Inspector in Charge of the Bureau of Animal Industry activities in Montana has a very definite and worthwhile understanding of range problems and the needs and welfare of the western stock growers.

We express our sincere appreciation to Dr. G. W. Cronen and his efficient field corps for their capable and efficient cooperation.

We express to Dr. B. T. Simms, Chief of the Bureau of Animal Industry at Washington, D. C., our sincere appreciation for his kindly and efficient understanding of Montana's disease problems and for the cooperation which he has rendered this Department.

MONTANA LIVESTOCK SANITARY BOARD CORPS

I express my personal appreciation to each member of the Montana Livestock Sanitary Board personnel and bespeak to you my highest commendation for their loyal and efficient service.

VETERINARY SERVICE

I repeat what we said about veterinary service in our 1945 report:

Veterinary service is a hard work. It entails long hours and field investigations and post-mortems at times under very cold and trying weather conditions.

Our office force is not adequate to take care of our reports and files in a manner in which our reports should be kept. To perform the office work has required many hours of overtime. We trust that this situation now may be remedied by reason of increased appropriation, when office personnel becomes available. At the present time it seems simply impossible to get either adequate office personnel or competent field veterinarians.

NECROLOGY

We deeply regret to record in this report the passing of Walter Kropp, who was a member of the Livestock Sanitary Board until he resigned due to ill health.

We regret with more than passing sadness on having to report the passing of Dr. A. F. Baldwin of Miles City, who was associated as a resident deputy State veterinary surgeon for the Montana Livestock Sanitary Board since July 14, 1919.

It is with deep sorrow that we record the passing of Paul Raftery, Secretary of the Livestock Commission, and who cooperated with the Montana Livestock Sanitary Board for the upbuilding of the livestock industry and to the credit of the Livestock Commission and the Livestock Sanitary Board.

Respectfully submitted,

W. J. BUTLER
State Veterinary Surgeon and
Executive Officer

REPORT OF THE BACTERIOLOGIST & PATHOLOGIST
December 1, 1945 to November 30, 1946

During the year ending November 30, 1946 there were 53,786 specimens examined in the laboratory.

The material consisted of blood, smears, skin scrapings, exudates, feces, pus, parasites, tissues, soil, milk and cream.

The species of animal and bird life represented by these specimens are horses, cattle, sheep, swine, dogs, cats, deer, antelope, chipmunk, mink, chinchilla, rabbits, ducks, chickens, turkeys, pheasants and canaries.

The following is a classified list of diagnoses made giving the number of positive, negative and suspicious diagnoses made in each case:

		POSITIVE	NEGATIVE	SUSPICIOUS
Abortion, Vibrionic	Sheep	2		
Abscesses, Corynebacterium bovis	Cattle	2		
" Corynebacterium ovis	Deer	2		
" Staphylococcic	Antelope	1		
" Staphylococcic	Chipmunk	1		
" Staphylococcic	Sheep	1		
Actinobacillosis	Cattle	3		
Allergy	Cattle	1		
Anaplasmosis	Cattle	3	1	
Anthrax	Cattle		10	
Arthritis, Staphylococcic	Turkeys	4		
Bacillary icterohemoglobinuria				
Agglutination test	Cattle	28	621	26
Tissues	Cattle	2		
Blackhead	Turkeys	12		
Blackleg	Cattle	13	4	
"	Sheep	1		
Brucellosis, Agglutination test	Cattle	1,940	42,825	2,100
" "	Goats		11	
" "	Horses	3	1	
" "	Human		1	
" "	Milk	1	11	
" "	Swine		1	
Brucella abortus, vaccine for				
viability		1		
Caseous lymphadenitis	Sheep	1		
Colibacillosis	Cattle	1		
"	Chickens	11		
"	Turkeys	20		
Coryza	Chickens	2		
"	Turkeys	3		
Cysts	Chickens	1		
"	Turkeys	3		
Distemper	Cat	1		
"	Mink	1		
Eclampsia	Mink	2		
Edema of wattles	Chickens	2		

		POSITIVE	NEGATIVE	SUSPICIOUS
Emphysema, mesenteric	Swine	1		
Encephalomalacia	Chickens	7		
Enteritis, mucoid	Rabbits	2		
Enterotoxemia	Sheep	10	2	
Erysipelas, agglutination test	Sheep		4	
" "	Swine	2	6	
" "	Soil		3	
" tissues	Swine	5	4	
Fitness for food	Milk	1		
"	Beef	1		
Hepatic coccidiosis	Rabbits	2		
Hexamatiasis	Pheasants	2	29	
Hydrocephalus	Cattle	1		
Hypercalcemia	Swine	4		
Identification of specimens:				
Gland from cow		1		
Hypoderma bovis (grub)		1		
Plant		1		
Tumor from cow		1		
Impaction of crop	Turkeys	4		
Infectious anemia, serum test	Horses	4	8	
Infectious bronchitis	Chickens	41		
"	Turkeys	6		
Infectious disease examination	Cattle		3	
"	Chinchilla		1	
"	Horses		1	
"	Mink		2	
Johne's Disease	Sheep	2		
Keratitis	Cattle	2		
Laryngotracheitis	Chickens	3		
Leukosis	Chickens	13		
Malignant edema	Cattle	6		
Mange	Cattle	1	12	
"	Dog		1	
"	Swine	1		
Navel ill	Sheep	3		
Necrobacillosis	Cattle	4		
"	Sheep	1		
"	Swine	1		
No diagnoses	Cattle	3		
"	Chickens	29		
"	Dog	1		
"	Horse	1		
"	Mink	1		
"	Rabbit	1		
"	Sheep	1		
"	Turkeys	10		
Omphalitis	Turkeys	10		
Parasites, fecal examination	Cat	1		
" "	Cattle	12	8	
" "	Dogs	8	32	
" "	Horses	45	1	
" "	Sheep	17		
Parasites, Intestinal examination:				
Ascariasis	Chicken	1		
Coccidial oocysts	Cattle	2		

		POSITIVE	NEGATIVE	SUSPICIOUS
Parasites, Intestinal examination continued:				
Coccidial oocysts	Chickens	22		
"	Rabbit	1		
Teniasis	Cattle	1		
"	Chickens	4		
Pasteurellosis	Cattle		1	
Peritonitis	Chickens	4		
Perosis	Chickens	4		
Photosensitization	Cattle	1		
Pneumonia	Chickens	6		
"	Turkeys	2		
Pododermatitis	Cattle	1		
Poisoning, forage	Ducks	8		
"	Sheep	3		
"	Swine	1		
"	Turkeys	4		
Poisoning, salt	Sheep	1		
Pullorum disease, tube agglutination test	Chickens	14	4	
"	Turkeys		508	
Pullorum disease	Chickens	61		
Pyelonephritis	Cattle		1	
Rabies	Dogs		6	
Sarcosporidiosis	Ducks	2		
Skin lesions, (tuberculosis)	Cattle	2		
Stercoremia	Sheep	1		
Tetany	Sheep	2		
Trauma	Canary	1		
"	Cat	1		
"	Chickens	2		
"	Pheasant	1		
Tuberculosis	Cattle	2	1	
"	Chickens	2		
Tularemia	Rabbit		1	
Unsatisfactory specimens:				
Blood samples, hemolyzed		75		
Cat		1		
Chickens		18		
Milk samples		21		
Swine tissue		1		
Urinary calculi	Cattle	1		
Vitamin A deficiency	Chickens	4		
"	Turkeys	3		
Vitamin D deficiency	Chickens	16		
"	Turkeys	6		
Milk samples for bacterial count		963		
" " " *B. coli* determination		238	701	
" " " *Br. abortus* agglutinins		4	910	
" " " Streptococcic determination (plate)		78	1,424	
" " " Streptococcic determination (smear)		83	453	
" " " Staphylococcic determination (plate)		9		
" " " Staphylococcic determination (smear)		11		

	POSITIVE	NEGATIVE	SUSPICIOUS
Cream samples for bacterial count	6		
" " " B. coli determination		6	
Milk for flavor test	2		
Total 12/1/45-11/30/46	4,040	47,620	2,126
Total 12/1/44-11/30/45	3,781	47,485	1,946
Total for biennium	7,821	95,105	4,072

Respectfully submitted,

E. M. JONESCHILD
Bacteriologist & Pathologist

INVESTIGATIONS SYNOPTICALLY ARRANGED INCLUDING COOPERATIVE WORK WITH THE UNITED STATES BUREAU OF ANIMAL INDUSTRY

HORSES

Horses tested for brucellosis	4
Reactors	1

DOURINE

Number affected	None

GLANDERS

Number affected	None

ENCEPHALOMYELITIS

Number inspected	244
Cases	56

MISCELLANEOUS INSPECTIONS

Number inspected	2,180

SCABIES

Number inspected	None
Affected	None

IMPORTATION INSPECTIONS

Horses clinically inspected and mallein tested at destination	None
Reactors	None
Horses clinically inspected at destination	None

TESTED AT PORT OF ENTRY AND INSPECTED

Mallein tested	None
Clinically inspected	771
Diseased	None

INSPECTIONS FOR INTERSTATE SHIPMENT

Mallein tested	None
Reactors	None
Clinically inspected	6,606
Total horses inspected	9,805

CATTLE
TUBERCULOSIS

Dairy cattle tested	16,207
Reactors (no lesion cases)	2
Percentage of reactors	.012%
Other cattle tested	6,128
Reactors	2
Percentage of reactors	.03%
Cases reported on post-mortem inspection	4

ACCREDITED TUBERCULOSIS-FREE HERDS

Number tested	516
Reactors	None

RETESTS OF IMPORTED CATTLE

60-90 retests	None

CATTLE TESTED AT PORT OF ENTRY

Total	None

CATTLE TESTED AT DESTINATION

Total	None

TESTS FOR INTERSTATE SHIPMENT

Tuberculin tested	2,435
Reactors	None
Total tested for tuberculosis	25,286
Number of reactors	4
Percentage of reactors	.015%

SCABIES

Number inspected	171,484
Number affected	40

BRUCELLOSIS

Number inspected and blood tested	46,865
Positive reactors	1,940
Percentage positive reactors	4.13%
Suspicious reactors	2,100
Percentage of suspicious reactors	4.48%

MASTITIS

Number clinically inspected	786
Number affected	161

URINARY CALCULI

Number inspected	3,846
Number affected	94

BACILLARY ICTEROHEMOGLOBINURIA

Number inspected	553
Number affected	35
Number vaccinated	13,975

BLACKLEG

Number inspected	4,683
Number affected	147

ASTHMA

Number inspected	900
Number of cases	32

INFECTIOUS KERATITIS

Number inspected	5,596
Number affected	318

MALIGNANT HEAD CATARRH

Number inspected	2
Number affected	2

MISCELLANEOUS CATTLE INSPECTIONS

Cattle inspected for various diseases	179,643

CATTLE INSPECTED AT PORT OF ENTRY

Number clinically inspected	188
Diseased	None
Clinically inspected upon arrival in Montana	None

INSPECTIONS FOR INTERSTATE SHIPMENT

Number inspected	124,127
Number diseased	None
Total cattle inspected	552,648

SHEEP
SCABIES AND MISCELLANEOUS DISEASES

Number inspected	247,224
Number affected with scabies	None

FOOT ROT

Number inspected	5,800
Number affected	14

CONTAGIOUS ECTHYMA

Number inspected	2,580
Number affected	1,123

VIBRIONIC ABORTION

Number inspected	1,270
Number of cases	80

BLACKLEG

Number inspected	1,034
Number affected	5

LIP AND LEG ULCERATION

Number inspected	15,159
Number affected	808

ENTEROTOXEMIA

Number inspected	6,197
Number cases	20

IMPORTATION INSPECTIONS

Number inspected and quarantined	126,803
Number dipped and quarantined including 1st & 2nd dippings	None
*Reinspection of imported sheep	35,223
Number inspected at Port of Entry	131

*Includes contact native sheep and one or more reinspections

INSPECTIONS FOR INTERSTATE SHIPMENT

Number inspected	785,664
Total sheep inspected in 1946	1,227,085

GOATS

Number inspected	145
Number diseased (including 11 blood tests for brucellosis)	None

SWINE

Number inspected for various diseases including hog cholera	42,489
Premises infected with hog cholera	4
Swine inspected at Port of Entry	2
Inspected for interstate shipment	477
Inspected for erysipelas	1,944
Number diseased	150
Total swine inspections 1946	44,912

POULTRY

Number inspected for tuberculosis and various diseases	43,124
Number tested under supervision and tested by us for pullorum	4,031
Reactors	93
Percentage of reactors	2.3%

Number tested by pullorum testing agents	14,977
Reactors	412
Percentage of reactors	2.75%

DOGS

Inspected for various diseases	79
Cases of rabies	None
Inspected for interstate shipment	945
Total inspected in 1946	1,024

GAME AND FUR-BEARING ANIMALS

*Elk inspected for scabies	9
Number affected	9

*Inspected and diagnosed by Veterinary Research Laboratory

GRAND TOTALS

Total animals inspected and tested	1,859,881
Total fowls inspected and tested	62,132
Total animals and fowls inspected 1946	1,922,013

MILES TRAVELED BY DISTRICT DEPUTIES AND MILK INSPECTOR

Auto	267,149

ESTIMATED NUMBER OF MILES TRAVELED BY RESIDENT DEPUTIES

Auto	51,636
Total miles traveled in 1946	318,785

REPORT OF THE CHEMIST

SAMPLES FOR POISON ANALYSIS
Stomach contents, tissues, etc.

MATERIAL	ARSENIC	LEAD	STRYCHNINE	NEGATIVE	TOTAL
Bovine	4	12		51	67
Canine		1	12	6	19
Avian		3		8	11
Equine		1	4	25	30
Feline				2	2
Ovine		1		1	2
Porcine				8	8
Totals:	4	18	16	101	139

MISCELLANEOUS SAMPLES FOR POISON ANALYSIS

MATERIAL	ARSENIC	LEAD	STRYCHNINE	NEGATIVE	TOTAL
Austria peas		1			1
Bucket scrapings		2			2
Buttermilk			1		1
Cement				1	1
Dog food			1	1	2
Dust from mine table		1			1
Feed sack				1	1
Garbage				1	1
Garbage barrel scrapings				1	1
Grain screening pellets				1	1
Grain sample			2	7	9
Grasshopper bait				1	1
Gopher poison			1		1
Ensilage				1	1
Mash				1	1
Meat			2		2
Pole chips	1			2	3
Soil	1	4		14	19
Soil from pole base	2			1	3
Tissues			1		1
Water	1			2	3
Watering tank scrapings				1	1
Weeds				1	1
Totals:	5	8	8	37	58

MISCELLANEOUS EXAMINATIONS OTHER THAN POISONS

Water samples for total mineral content	12
Water sample for available chlorine	1
Horse saliva samples for alkaloidal drugs (negative)	6
Canine blood sample for calcium in blood serum	1
Bovine blood samples for calcium in blood serum	2
Feed samples negative rancid cod liver oil	2
Grain sample for salt	1
Pill sample for general analysis	1
Total	26

MILK & CREAM SAMPLES

Milk:	For butterfat content (includes 17 unofficial)	957
"	Solids not fat (includes 12 unofficial)	910
"	Lactometer reading (includes 12 unofficial)	910
"	Total solids calculated (includes 12 unofficial)	910
"	For total solids	1
"	Sediment test (includes 11 unofficial)	896
"	Phosphatase test (improper pasteurization)	8
"	" " (proper pasteurization)	192
"	For preservatives	1
Cream:	For butterfat content (includes 4 unofficial)	11
"	Solids not fat	2
"	Lactometer reading	2
"	Total solids calculated	2
"	Sediment test	2
"	Phosphatase test (proper pasteurization)	1
Chocolate milk:		
	Butterfat	2
	Solids not fat	2
	Lactometer reading	2
	Total solids calculated	2
Skim milk:		
	Butterfat	2
	Solids not fat	2
	Lactometer reading	2
	Total solids calculated	2
	Sediment test	2
*Total tests made on milk, cream, chocolate milk & skim milk		4823

*(This includes 972 individual samples submitted for chemical analysis)

SUMMARY OF SAMPLES ANALYZED

	1945	1946	Biennium Total
Stomach contents, tissues, etc., for poisons	103	139	242
Miscellaneous samples for poisons	36	58	94
Miscellaneous examinations		26	26
Milk and cream samples	796	972	1768
Totals:	935	1195	2130

Respectfully submitted,

Jerree McCarty

Jerree McCarty, Chemist

RECAPITULATION OF IMPORTATIONS FOR 1946

STATE	HEALTH CERTIFICATES	TEST CHARTS	HORSES HC	CATTLE HC	CATTLE TEST	SHEEP	SWINE	DOGS	CATS	MISC.
Alaska	1							1		
Canada	99	40	855	341	336	171	1	1		3
Mexico	14			8194						
Arizona	10		9	2640						
California	81		11	2089		4501		54	1	
Colorado	58	41	37	8339	133		2	10		1
Idaho	119	14	34	5191	60	7961	4	44		
Illinois	38	14	9	3	19	1	13	25		
Indiana	5	2			2		1	4		
Iowa	56	12	3	918	114	20	11	35		
Kansas	25	44	28	253	63			16		
Kentucky	1							1		
Louisiana	1			108						
Maryland	3				2			2		
Massachusetts	2							3		
Michigan	4	1			1			4		
Minnesota	81	13	1		41	4	41	73	1	
Mississippi		2			2					
Missouri	24	2	1	61	12	37	2	18		
Nebraska	53	29	132	406	95		2	48		
Nevada	6					81		6		
New Mexico	16		41	4527		1	1	2		
New York		1			19					
North Dakota	119	78	49	2142	509	23		39		
Ohio	11		10					9		
Oklahoma	5		1					4		
Oregon	425		3	673		6439		42		
Pennsylvania	1							1		
South Carolina	1							1		
South Dakota	46	13	11	191	63	1905	1	23		
Tennessee	4		3					1		
Texas	57	9	59	13580	80			6	1	
Utah	40	3	14	1637	13	103		17		
Washington	217	3	101	765	3	38914	9	240	3	1
Wisconsin	31	10	1	4	118		2	38	4	
Wyoming	158	104	352	3235	407	27011	87	29		
TOTALS:	1812	435	1815	55297	2092	87172	177	797	10	5

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